

REMARKS

The application includes claims 1-7, 15-25, 29-35, and 39-42 prior to entering this amendment.

The examiner rejected claims 1-7, 15-25, 29-35, and 39-42 under 35 U.S.C. § 103(a) over Ryu (U.S. Patent 6,295,386) in view of Nagashima (U.S. Patent 7,099,025).

The applicants amend claims 7, 16, and 23-25.

The applicants add new claims 43-51.

The application remains with claims 1-7, 15-25, 29-35, and 39-51 after entering this amendment.

The applicants do not add new matter and request reconsideration.

Claim Rejections - 35 U.S.C. § 103

The examiner rejected claims 1-7, 15-25, 29-35, and 39-42 under 35 U.S.C. § 103(a) over Ryu in view of Nagashima. The applicants traverse the rejection.

Claim 1 recites “repeating the using an image capturing element for a subsequent scanning object without further calculating.” The examiner alleged that Ryu discloses this feature, referring the applicants to step S10 of Fig. 5B. Ryu concerns a Shuttle Type Scanner whereby *a scanning head of the scanner is reciprocated in front of a stationary document*.¹ Fig. 5B depicts a method for correcting image errors due to mechanical tolerance or the inertia tolerance of the scanning module within the context of scanning this single stationary document.² As a part of this method, Ryu produces correction tables which correct for seven types of errors which may exist in a line of 160 dots in a line of the scanning band³ (which presumably correspond to a linear CCD array). Consequently, the correction process is applied on a scan-line by scan-line basis. Therefore, S10’s “Is the scanning of the document completed?” refers to the continued scanning of the single document resting on the scanner bed, and not “repeating the using an image capturing element for a *subsequent scanning object* without further calculating” as required by the claims. Independent claims 15, 23, 29, 33, and 39 contain similar language.

¹ Ryu Figs. 2A-2C. “A carriage and return motor 1 is mounted at a position adjacent to a scanning and printing areas and provides a driving force for a scanning module 2 *so as to be horizontally reciprocated with scanning image data recorded on a document*.” Ryu column 4, lines 40-10.

² Ryu column 6, line 50 – column 7, line 15, and Fig. 5B S10 “Is the scanning of *the document* completed.”

³ Ryu column 6, lines 36-45.

The applicants therefore respectfully request the examiner to withdraw the rejections of independent claims 1, 15, 23, 29, 33, and 39. Claims 2-7, 16-22, 24-25, 30-32, 34-35, and 40-42 depend from claims 1, 15, 23, 29, 33, and 39, respectively, and thus overcome the rejection for at least the same reasons, in addition to the further novel features recited therein. Therefore, the applicants respectfully request the examiner to withdraw the rejections of these claims also.

Claim 1 recites “calculating a calibration parameter responsive to determining that the calibration parameter is not stored in memory.” The examiner alleged that Nagashima discloses this feature, referring the applicants to the flowchart of Figures 3 and 4, and particularly to a path consisting of S100 (NO) – S103(NO) – S115(YES) – S108 – S109 – S110 – S111 – S112-1 – S3 – S201. First, the applicants respectfully point out to the examiner that if the outcome of step S100 is NO, then in step S102-2 the Correction Data Comparison Flag is set to “OFF.” Consequently, in step S115, since the Correction Data Comparison Flag is set to “OFF,” the outcome of this step which asks “Correction Data Comparison Flag = “ON”?” has to be NO, and not YES, as the examiner alleged. Therefore, the flow chart sequence must follow the link “2” from Fig. 3 to Fig. 4 and proceed along the path of S113(NO) – S112-2 – S3 – S200(NO) – S5 – END, rather than following link “A” as the examiner alleged. By following the correct path in the flow diagram, it becomes evident that Nagashima does not disclose or suggest “calculating a calibration parameter responsive to determining that the calibration parameter is not stored in memory.” Second, the applicants would like to respectfully suggest that the context of the flowchart of Figures 3 and 4 is not analogous to that of the applicants’ invention(s). Not only does Nagashima concern printers not scanners, but the flowchart of Figures 3 and 4 concerns operations performed by a host computer *connected to the printer* rather than the printer itself.⁴ Step S2 of Fig. 1 concerns the acquisition by the host computer of correction data from the printer,⁵ which entails all of the steps of Fig. 3 up through step S112 of Fig. 4. The host computer forms a correction table from the correction data *which has previously been stored in the printer* after the controller unit of the printer has internally processed a “calibration request” from the printer’s engine unit.⁶ Nagashima does not teach or suggest how an initial correction

⁴ See Nagashima col.7, lines 45-51.

⁵ See Nagashima col.7, lines 7-8.

⁶ “The data controller 105 checks if correction data for calibration (to be referred to as new correction data hereinafter) is present in the storage unit 203 of the printer 200 (step S100). *This new correction data is stored in the*

table is formed in the computer, but does state that “*the engine unit [of the printer] 201 issues a calibration request when one of status parameters has reached a predetermined threshold value,*”⁷ and then discusses status parameters such as toner fixing temperature and its effect upon the relationship between the input and output (printed character) densities (see Fig.5).⁸ Since the status parameters of Nagashima do not include a “calibration parameter is not stored in memory,” a calibration request is not issued by the engine unit of the printer when there is no calibration parameter stored in memory. This is because the effects of all of the status parameters are all determined in advance and stored in ROM as correction data in the storage unit of the printer prior to the actual sale or use of the printer.⁹ Consequently, Nagashima does not teach or suggest “calculating a calibration parameter responsive to determining that the calibration parameter is not stored in memory.” Independent claims 15, 23, 29, 33, and 39 contain similar language. The applicants therefore respectfully request the examiner to withdraw the rejections of independent claims 1, 15, 23, 29, 33, and 39. Claims 2-7, 16-22, 24-25, 30-32, 34-35, and 40-42 depend from claims 1, 15, 23, 29, 33, and 39, respectively, and thus overcome the rejection for at least the same reasons, in addition to the further novel features recited therein. Therefore, the applicants respectfully request the examiner to withdraw the rejections of these claims also.

storage unit 203 by the controller unit 202 in response to a calibration request which is issued by the engine unit 201 in the printer 200 to the controller unit 202. Nagashima col.7, lines 45-51.

⁷ Nagashima col.7, lines 52-56. “The status parameters include the use frequency after a photosensitive drum has been exchanged, the temperature and humidity inside the printer, the temperature of a fixing unit for melting toner, and the like in case of, e.g., the electrophotographic engine. On the other hand, in an ink-jet type engine that heats ink by a heater to cause film boiling, and ejects ink by that pressure, the ink temperature, the temperature of the heater for heating the ink, and the like are used as status parameters. The engine unit 201 monitors such parameters using sensors, counters, and the like. As shown in FIG. 6, the printer may comprise a density sensor for directly detecting the toner density on a drum, and the directly detected image density may be used in calibration.”

Nagashima col.4, lines 49-62.

⁸ Nagashima col.7, lines 57-64.

⁹ Nagashima col.7, line 66 – col. 8 – line 14.

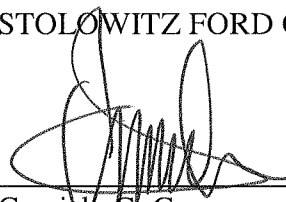
CONCLUSION

For the foregoing reasons, the applicants request reconsideration and allowance of claims 1-7, 15-25, 29-35, and 39-51. The applicants encourage the examiner to telephone the undersigned if it appears that an interview would be helpful in advancing prosecution.

Customer No. 73552

Respectfully submitted,

STOLOWITZ FORD COWGER LLP

A handwritten signature in black ink, appearing to read 'Graciela G. Cowger', is written over a horizontal line.

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